

**BOARD OF COUNTY COMMISSIONERS
AGENDA ITEM SUMMARY**

MEETING DATE: 04/17/03

DIVISION: COUNTY ADMINISTRATOR

BULK ITEM:

DEPARTMENT: AIRPORTS

AGENDA ITEM WORDING: Presentation by URS of the Master Plan Update for the Key West International Airport (KWIA).

ITEM BACKGROUND: A Master Plan is an inventory of airport facilities that are needed both now and in the future. It tells us what we need now, which may differ from what we have now, and it also tells us what we will need for the next 20 years. Because meeting these needs almost always requires airport development and expansion projects, Master Plans tend to be controversial. Our master plan discusses the need for many airport improvements, which include the runway safety area, a runway extension, and a new airline passenger terminal complex. We tried to make this is a community document and not just an airport document. Over the last two years, we have invited 25 agencies and organizations in the Key West area to participate in our master planning process. Many options for airport expansion were presented, Not all of these groups chose to participate, and those that did were not always in agreement on all airport issues. The document reflects the majority view of those who attended the Master Plan meetings. URS will also present information on funding scenarios for the projects proposed in this Master Plan.

PREVIOUS RELEVANT BOCC ACTION: URS Professional Service Order (PSO) to commission the Master Plan Update approved by the BOCC 3/21/01.

STAFF RECOMMENDATION: Please review the plan and the presentation. Please adopt the Master plan for submittal to the FAA for their review and comment, or suggest modifications to the document. If the decision is made to move ahead with the terminal project, we would need a motion to proceed with a Terminal Concept Study, which would be the next step in that process.

TOTAL COST: N/A

BUDGETED: N/A

COST TO COUNTY: N/A

REVENUE PRODUCING: N/A

AMOUNT PER MONTH/YEAR: N/A

APPROVED BY: County Attorney N/A

OMB/Purchasing N/A

Risk Management N/A

DIRECTOR APPROVAL



Peter J. Horton

DOCUMENTATION: Included X

To Follow

Not Required

AGENDA ITEM #

2-CL

DISPOSITION: _____

Capital Projects Plan

ADOPTED 3/19/03

3/27/2003

Fund 304

One Cent Sales Tax Infrastructure	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	
	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	
	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Comments
Revenues:																		
1 Cent Sales Tax	10,580,000	10,500,000	10,500,000	10,500,000	10,500,000	10,500,000	10,500,000	10,500,000	10,500,000	10,500,000	10,500,000	10,500,000	10,500,000	10,500,000	10,500,000	10,500,000	2,625,000	
Interest Income	700,000	700,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000	375,000	
Less 5%	(560,000)	(560,000)	(543,750)	(543,750)	(543,750)	(543,750)	(543,750)	(543,750)	(543,750)	(543,750)	(543,750)	(543,750)	(543,750)	(543,750)	(543,750)	(543,750)	(150,000)	
Special Assessment - Breezeswept Beach		322,886																
Reimbursement from fund 403		1,000,000																
Reimbursement from fund 305		1,450,000																
10/01/03 Surplus Fund Balance		2,900,000																May be used for debt service reduction
Beginning Fund Balance Forward	25,061,511	12,371,159	4,513,837	42,181	20,525	1,598,868	4,677,212	2,755,556	283,900	1,312,243	540,587	568,931	547,275	525,618	503,962	432,306	860,630	
Total Revenues	35,701,511	28,684,045	14,845,087	10,373,431	10,351,775	11,930,118	15,008,462	13,086,806	10,615,150	11,643,493	10,871,837	10,900,181	10,878,525	10,856,868	10,835,212	10,763,556	3,710,630	
Appropriations:																		
PHYSICAL ENVIRONMENT (53x)																		
Animal Control Sewer & Recent Infr. Requests	180,000																	
Conservation Easement	17,500																	
Physical Environment			3,407,344	3,407,344	3,407,344	3,407,344	4,907,344	4,907,344	4,907,344	4,907,344	4,907,344	4,907,344	4,907,344	4,907,344	4,907,344	4,907,344	1,353,750	
Wastewater Treatment - Detention Facility	700,000																	
Wastewater Treatment	6,500,000	2,000,000																unmet+Big Coppitt+SFWMID
Total Physical Environment	7,397,500	2,000,000	3,407,344	3,407,344	3,407,344	3,407,344	4,907,344	4,907,344	4,907,344	4,907,344	4,907,344	4,907,344	4,907,344	4,907,344	4,907,344	4,907,344	1,353,750	FY 05 - FY 08 adjusted by \$1.5 mill.
NON-PHYSICAL ENVIRONMENT																		
Administrative Costs	416,233	516,563	516,563	516,563	516,563	516,563	516,563	516,563	516,563	516,563	516,563	516,563	516,563	516,563	516,563	516,563	516,563	142,500
Asbestos Abatement/ Demolition PSB, S.I.	350,000																	
Big Coppitt Key Park	100,000	600,000																\$38,600 Impact Fees in Fiscal Year 98 - 99
Big Pine Park	1,000,000	2,500,000																Funding for land 50% 304/50% Land Authority
Breezeswept Beach Estates Culvert	75,913	246,973																
Cash Balance	5,200,000																	
Contingency	2,400,000																	
Cost Allocation to General Fund	179,000	179,000	179,000	179,000	179,000	179,000	179,000	179,000	179,000	179,000	179,000	179,000	179,000	179,000	179,000	179,000	44,750	
COURTHOUSE ANNEX						1,000,000	4,000,000	4,000,000										
C: Roof, Chilled AC	30,000																	Roof Replacement and Chilled Water Plant
D: 2nd Chilled AC	750,000																	
Cudjoe Fire/ EMS Facility	400,000	800,000																New Building/Rezoning
Development/Improvement of Parks	20,000	20,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	Playground Equip. Replacement and Misc. Park Dev.
Fire Station/ EMS/Storage at PSB, Stock Isl.	100,000	1,200,000	500,000	500,000														
Fire/EMS Vehicle Replacement Program	834,536	500,000	500,000	500,000	500,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	
Future Government Facility										2,500,000		2,500,000		2,500,000				non specific
Future Park Facility									2,000,000		2,500,000		2,500,000		2,000,000		1,869,649	non specific
Gato Building	15,000																	

Fund 304

Capital Projects Plan

Fund 304

ADOPTED 3/19/03

3/27/2003

One Cent Sales Tax Infrastructure	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	
	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	
	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Comments
General Govt. Proj. - Future Years	4,771,159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Hold for Programmed Projects
Harry Harris Park Improvements	150,000	150,000																
Historic Jail								200,000	700,000									
Islamorada Interlocal	285,000																	Islamorada Emergency Vehicles
Jackson Square Signage	50,000																	
Jackson Square Utilities	100,000																	
Jail Debt Service	4,618,184	4,612,672																
Key Largo Skate Park	375,000	125,000																
Key West Airport	0	1,300,000	1,500,000	2,200,000	0													
Library Improvements (five facilities)	175,000	720,000																
Lower Keys Multiuse facility		0	0	0														
Marathon Airport Cash Flow	1,000,000																	
Marathon Airport Office Renovation	30,000																	
Marathon Courthouse	166,500																	
Marathon EOC						500,000	1,000,000	1,000,000	300,000									
New Debt Service		1,800,000	1,800,000	1,800,000	1,850,000	1,850,000	1,850,000	1,900,000	1,900,000	1,900,000	1,900,000	1,950,000	1,950,000	1,950,000	2,000,000	2,000,000	0	
NEW JUDICIAL BUILDING	1,000,000	5,000,000	5,000,000															Courtroom, Judges, Etc. at Jackson Square
Old Mariners Hospital	500,000	900,000																
Old Tavernier School				400,000	100,000													
Property Appraiser Computer Room	50,000																	
Public Works Compound - Lower Keys			50,000	500,000	650,000													
Public Works Compound - Upper Keys					1,500,000	0												
Records Storage Facility - Middle Keys								300,000	300,000									
Records Storage Facility - Upper Keys			300,000	300,000														
Settlement Agreement	1,000,000	1,000,000	1,000,000															
Stock Island Detention Facility Boilers	100,000																	
Sugarloaf Recreation		0	0															
Upper Keys Government Center Property Acquisition	1,850,000																	
Vehicle Replacement Program	11,830																	
West Martello Tower	100,656																	
Wilhelmina L. Harvey Park	100,000																	Sod, Irrigation, Fences, \$60,000 Impact Fees
Total Non-Physical Environment	28,304,011	22,170,208	11,395,563	6,945,563	5,345,563	3,845,563	7,345,563	7,895,563	4,395,563	6,195,563	5,395,563	5,445,563	5,445,563	5,445,563	5,495,563	4,995,563	2,356,899	
TOTAL APPROPRIATIONS	35,701,511	24,170,208	14,802,906	10,352,906	8,752,906	7,252,906	12,252,906	12,802,906	9,302,906	11,102,906	10,302,906	10,352,906	10,352,906	10,352,906	10,402,906	9,902,906	3,710,649	
EXCESS REV. TO BE CARRIED FWD	-	4,513,837	42,181	20,525	1,598,868	4,677,212	2,755,556	283,900	1,312,243	540,587	568,931	547,275	525,618	503,962	432,306	860,650	1	
Funds to be split based on Allocation Policy																		
Total New Revenue			10,331,250	10,331,250	10,331,250	10,331,250	10,331,250	10,331,250	10,331,250	10,331,250	10,331,250	10,331,250	10,331,250	10,331,250	10,331,250	10,331,250	2,850,000	
Administrative			516,563	516,563	516,563	516,563	516,563	516,563	516,563	516,563	516,563	516,563	516,563	516,563	516,563	516,563	142,500	
Total to be allocated			9,814,688	9,814,688	9,814,688	9,814,688	9,814,688	9,814,688	9,814,688	9,814,688	9,814,688	9,814,688	9,814,688	9,814,688	9,814,688	9,814,688	2,707,500	
Administrative			Off the top	Off the top	Off the top	Off the top	Off the top	Off the top	Off the top	Off the top	Off the top	Off the top	Off the top	Off the top	Off the top	Off the top	Off the top	

Fund 304

Capital Projects Plan

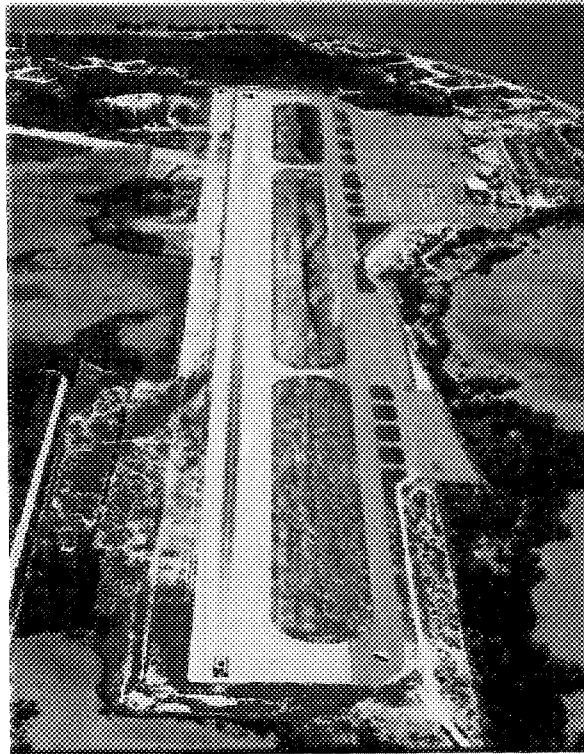
ADOPTED 3/19/03

3/27/2003

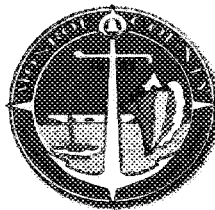
Fund 304

One Cent Sales Tax Infrastructure	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19	
	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	Proposed	
	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Plan	Comments
Physical Environment			34.72%	34.72%	34.72%	34.72%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	
Other - Non-Physical Environment			65.28%	65.28%	65.28%	65.28%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	

KEY WEST INTERNATIONAL AIRPORT MASTER PLAN UPDATE DRAFT EXECUTIVE SUMMARY



Prepared for:
Monroe County, Florida
and the
Federal Aviation Administration



Prepared by:
URS

March 2003

PREFACE

Key West International Airport is a critical element of the transportation system for Monroe County and the City of Key West. The airport provides facilities that enable commercial air service, which in turn, supports the travel needs of residents, businesses and visitors. In addition, the airport provides important facilities for general aviation and air cargo operators.

To ensure that Key West International Airport continues to meet the aviation infrastructure needs of Monroe County, an update of the airport's 1986 master plan was undertaken. This master plan update reassesses projections of passengers and aircraft operations and provides alternatives for the future development of airside and landside facilities. The plan provides airport management with a guide to recommended capital improvements and their projected cost.

The study was guided by an Advisory Committee that reviewed the findings of the study at key intervals and decided on alternatives preferred for future development. The resulting plan is briefly summarized on the following pages. For full descriptions and illustrations of proposed projects and other elements of the plan, please refer to the master plan report and the airport layout plan drawing set.

STUDY GOALS AND OBJECTIVES

The goal of the master plan update for Key West International Airport was to provide a long-term plan for the development of the airport in concert with the needs of the area it serves. The objectives that were established to reach this goal are listed below:

- Inventory existing airport facilities.
- Forecast future passengers and aircraft operations to determine future demand levels for airport facilities.
- Identify the facility improvements needed to accommodate projected levels of demand.
- Devise alternate methods of providing the required facilities.
- Plan future development in a manner that is operationally efficient.
- Assess the environmental impact of proposed development.
- Schedule capital improvements to coincide with the projected demand for each facility.
- Prepare cost estimates of proposed capital improvements.

STUDY CONCLUSIONS AND RECOMMENDATIONS

The master plan update provides the following conclusions and recommendations for consideration by the Monroe County Commission.

- Existing airfield facilities and pavements will be in good condition once the rehabilitation of the runway is complete. This project is scheduled for 2003.
- Existing landside facilities are in good condition except for the passenger terminal, which is in fair to poor condition, and the terminal annex that is in poor condition.
- The master plan projects passenger enplanements will grow to 445,083 by 2021 from 266,413 in 2002. This represents an average annual growth rate of 2.5 percent. The historical growth rate from 1991 to 2001 was 3.3 percent.
- The master plan projects aircraft operations will grow to 114,080 by 2021 from 91,524 in 2002. This represents an average annual growth rate of 1.1 percent. The historical growth rate from 1991 to 2001 was 0.9 percent.
- Existing airfield capacity is sufficient to accommodate projected level of aircraft operations without meaningful delay.
- The runway's safety area does not meet FAA standards. The master plan proposes a project to bring the runway safety area into conformance with FAA requirements. The proposed project would impact up to 38 acres of wetlands. A feasibility study is currently examining the environmental mitigation that would be required for this project.
- The existing runway length (4,801 feet) is not sufficient to serve existing and future aircraft without incurring payload penalties as high as 40 percent. A runway length of 5,801 feet would accommodate existing aircraft and aircraft likely to serve the airport in the future without incurring substantial payloads penalties. Therefore, the master plan proposes an extension of 750-feet on the west end of the runway and an extension of 500-feet on the east end of the runway. These extensions would provide an effective takeoff length of 5,801 feet for departures on Runway 9 and 5,301 feet for departures on Runway 27. Effective landing lengths would be 5,051 feet on Runway 9 and 4,801 feet on Runway 27.
- The existing passenger terminal is seriously undersized to accommodate existing levels of passengers. All functional areas of the existing terminal are too small for present passenger levels. Existing passenger demand requires nearly 40,000 square feet of space. By comparison, the existing terminal, including non-public areas and the terminal annex, provides only 22,000

square feet of space. The master plan projects that future passenger growth will increase the required amount of space to approximately 50,000 square feet by 2021.

- The master plan proposes a concept for a new 50,000 square foot passenger terminal to replace the existing terminal. The concept proposes that the terminal be elevated to meet floodplain requirements and includes the construction of an elevated roadway and parking structure. The proposed terminal concept has an estimated construction cost of \$23.2 million and a program cost of \$5.3 million for an estimated total cost of \$28.6 million.
- Due to the substantial cost of the concept for a new terminal, the master plan also includes an alternate concept for providing additional terminal space. The alternate concept proposes the construction of 8,000 square feet of new elevated space between the existing terminal and the FIS Building. This new space would require the demolition of the existing Terminal Annex. This concept also includes the reallocation and renovation of space in the existing terminal. The alternate plan has an estimated construction cost of \$4.2 million and a program cost of \$1.1 million for an estimated total cost of \$5.4 million.
- Construction of a new passenger terminal would reduce the number of parking spaces at the airport. Adjustments to parking rates would be required to encourage use of alternate modes of transportation and manage parking demand.
- A new access road is recommended as part of the new terminal concept. This access road would provide access from South Roosevelt Boulevard to the fuel farm, general aviation facilities, the air traffic control tower and the Aircraft Rescue and Fire Fighting Station.
- The master plan proposes the relocation of Monroe County Department of Public Works facilities off airport property. Additional rental car facilities are proposed in the space vacated by public works.
- The master plan includes third party development for the removal of obsolete general aviation hangars and replacement with new hangars along with new tie-down space.
- Land acquisition is not recommended by the master plan.

RECOMMENDED PLAN

The recommended development plan for Key West International Airport is divided into short-term and intermediate-term phases. These phases correspond to two consecutive five-year periods (2003 through 2007 and 2008 through 2012). The projects within each phase are intended to meet projected levels of demand. Changes to project scheduling will occur depending upon funding constraints, changes in demand levels and airport management and tenant priorities.

Short-Term Project (2003 through 2007)

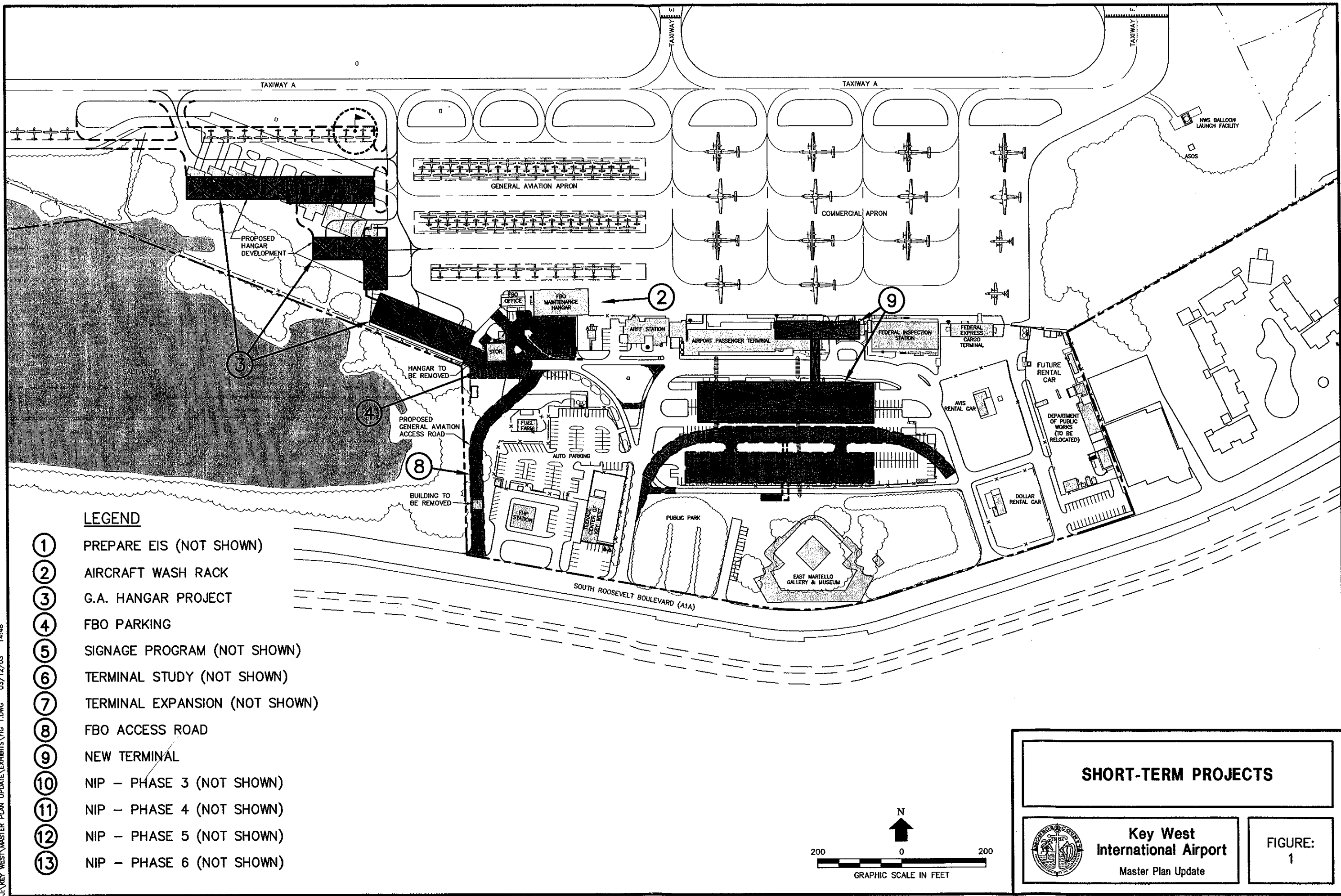
Project priorities during the short-term period include continuing environmental studies to support the construction of a standard runway safety area and runway extension, the construction of terminal area projects, and the continuation of the ongoing sound insulation program. These projects are illustrated in Figure 1. Estimated costs for these projects are shown in Table 1.

TABLE 1
SHORT-TERM (2003 TO 2007)
PROJECT COST ESTIMATES
 Key West International Airport
 Master Plan Update

Project Reference Number for Figure 7.1	Project	Estimated Construction Cost (2003 Dollars)	Estimated Program Costs (2003 Dollars)	Estimated Total Cost (2003 Dollars)
1	Prepare EIS	NA	\$1,000,000	\$1,000,000
2	Aircraft Wash Rack ¹	\$150,000	\$40,000	\$190,000
3	GA Hangar Project ¹	\$1,530,000	\$380,000	\$1,910,000
4	FBO Parking ¹	\$160,000	\$40,000	\$200,000
5	Signage Program	\$110,000	\$40,000	\$150,000
6	Terminal Study	NA	\$60,000	\$60,000
7	Terminal Expansion	\$4,290,000	\$1,070,000	\$5,360,000
8	FBO Access Road	\$310,000	\$70,000	\$380,000
9	New Terminal	\$23,810,000	\$5,950,000	\$29,760,000
10	NIP - Phase 3	\$2,500,000	\$1,000,000	\$3,500,000
11	NIP - Phase 4	\$2,500,000	\$1,000,000	\$3,500,000
12	NIP - Phase 5	\$2,500,000	\$1,000,000	\$3,500,000
13	NIP - Phase 6	\$2,500,000	\$1,000,000	\$3,500,000
Short-term Costs Assuming Terminal Expansion				
	Cost to Monroe County	\$14,400,000	\$6,110,000	\$20,510,000
	Cost to Third Party	\$1,840,000	\$460,000	\$2,300,000
Short-term Costs Assuming New Passenger Terminal				
	Cost to Monroe County	\$33,650,000	\$10,512,900	\$44,162,900
	Cost to Third Party	\$1,840,000	\$460,000	\$2,300,000

Source: URS Corporation, 2003.

Notes: ¹ These projects to be financed by a combination of third party funding.



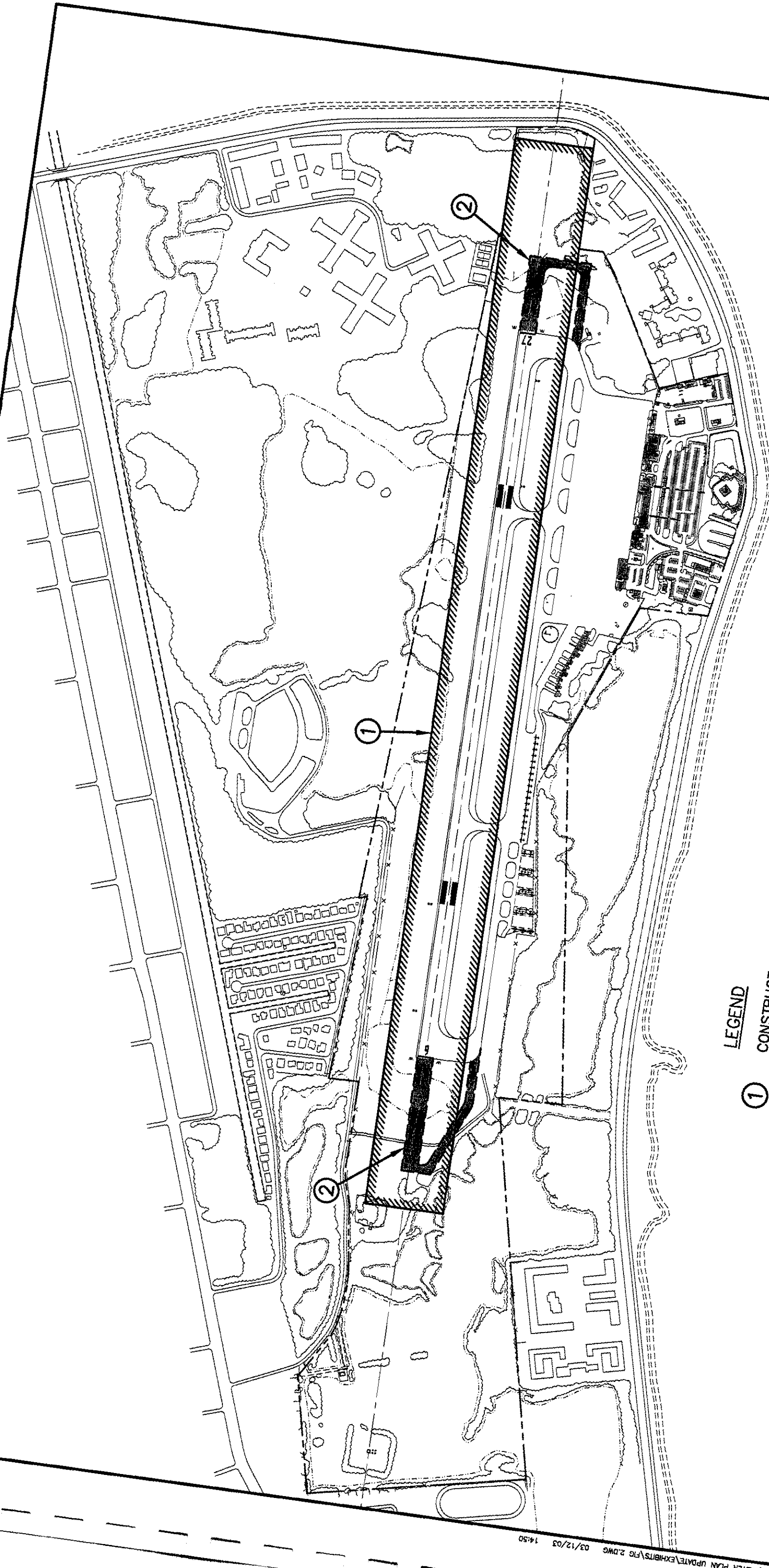
Intermediate-Term Projects (2008 through 2012)

Projects included in the intermediate-term focus on implementation of airfield improvements. It is anticipated that the EIS and associated environmental approvals would take a number of years to obtain. Therefore, assuming that the necessary environmental approvals are obtained, the construction of airfield projects would likely occur in the intermediate-term period. These projects are illustrated in Figure 2. Estimated costs for these projects are shown in Table 2.

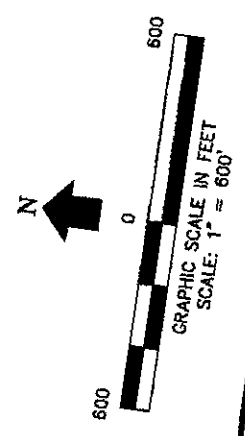
TABLE 2
INTERMEDIATE-TERM (2008 TO 2012)
PROJECT COST ESTIMATES
Key West International Airport
Master Plan Update

Project Reference Number for Figure 7.2	Project	Estimated Construction Cost in 2003 Dollars	Estimated Program Cost in 2003 Dollars	Estimated Total Cost in 2003 Dollars
1	Runway Safety Area	\$7,920,000	\$1,980,000	\$9,900,000
2	Runway Extension	\$2,600,000	\$650,000	\$3,250,000
3	NIP- Phase 7	\$2,500,000	\$1,000,000	\$3,500,000
Intermediate-Term Cost Totals		\$13,020,000	\$3,630,000	\$16,650,000

Source: URS Corporation, 2003.



- LEGEND**
- ① CONSTRUCT RUNWAY SAFETY AREA
 - ② CONSTRUCT RUNWAY EXTENSION
 - ③ NIP - PHASE 7 (NOT SHOWN)
 - AIRPORT PROPERTY LINE



INTERMEDIATE-TERM PROJECTS

Key West International Airport
Master Plan Update

FIGURE:
2